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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,540	11/13/2003	Michael V. Konshak	2003-040-DSK	9185

51344 7590 09/02/2005

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EXAMINER

CHANG, YEAN HSI

ART UNIT PAPER NUMBER

2835

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/712,540

Applicant(s)

KONSHAK, MICHAEL V.

Examiner

Yean-Hsi Chang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 11-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/13/03</u> | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Brunel et al. (US 5,921,644).

Brunel teaches a disk drive module (fig. 6) comprising: a disk drive (41), a carrier body (10) having an open sided cavity (between 12 and 13) defined by the carrier body, the disk drive being secured within the cavity (see fig. 13), and wherein the carrier and the disk drive have first and second cooperating surface features (protrusion 22 and threaded hole 42) that create a snap-fit to retain the disk drive in the cavity (claims 11-13); and wherein the carrier body flexes as the protrusion is inserted into the recess and as the protrusion is removed from the recess (shown in fig. 10) (claim 14).

3. Claims 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sands et al. (US 6,064,569).

Sands teaches a combination of a multiple disk drive storage apparatus and a plurality of removable disk drive modules (fig. 1), the disk drive storage apparatus including a housing (12) having a front side (14) and a motherboard (22) disposed

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within the housing, the motherboard having at least one light emitting member (LED 28), wherein each of the disk drive modules comprises: a disk drive (48), a one piece molded carrier body (30) that at least partially encloses the disk drive (shown in fig. 2), the carrier body having a front portion and a rear portion (shown in fig. 2), the front portion being disposed in the front side of the housing (shown in fig. 1) and the rear portion being disposed within the housing when the disk drive module is placed in the housing (also shown in fig. 1), a light pipe (60) integrally formed as part of the carrier body (shown in fig. 4) that extends from the rear portion of the carrier body to the front portion of the carrier body (shown in fig. 4), the light pipe being disposed adjacent the light emitting member inside the housing (shown in fig. 2) and transmitting light to the front portion of the carrier body (claims 15-16); and wherein the light emitting member is a status light that indicates an operational condition of the disk drive as detected by the motherboard (see col. 3, lines 49-52) (claim 17).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sands et al.

Sands discloses the claimed invention except indicating the carrier being molded from a polycarbonate polymer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a polycarbonate polymer material for the carrier, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use of its flexibility and elasticity.

***Allowable Subject Matter***

6. Claims 1-10 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter: The best prior art of record, Brunel et al. (US 5,921,644), and Sands et al. (US 6,064,569), taken alone or in combination, fails to teach or fairly suggest a multiple disk drive storage apparatus and a plurality of removable disk drive modules, wherein the plurality of removable disk drive modules comprises at least a carrier body having an integrally formed ejection spring exerting a biasing force to disconnect a connector of the disk drive module and to urge the disk drive module out of a housing of the storage apparatus as set forth in claim 1. Claims 2-9 are dependent claims from claim 1.

***Correspondence***


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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-2038. The examiner can normally be reached on 07:30 - 16:00, Monday through Friday (except every other Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

Yean-Hsi Chang  
Primary Examiner  
Art Unit: 2835  
September 1, 2005



YEAN-HSI CHANG  
PRIMARY EXAMINER